

## ABSTRACT

**TRANSISTOR**

A transistor has a source electrode (22) on the opposite side of a  
5 semiconductor body layer (10) to a gate electrode (4) insulated from the body  
layer (10) by gate insulator (8). The source electrode (22) has a potential  
barrier to the semiconductor body layer (10), for example a Schottky barrier.  
At least one drain electrode (54) is also connected to the semiconductor body  
layer (10). A suitable source-drain voltage and gate voltage depletes the  
10 region of the semiconductor body layer adjacent to the source electrode (22),  
and then source-drain current is controlled by the gate voltage.

[Figure 14]